

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PTHLH/PTHrP in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 677939
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PTHLH/PTHrP Ala37-Arg175 Accession # P12272
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The parathyroid hormone-like hormone (PTHLH), also known as PTHrP, has been recognized in patients suffering from tumors associated with the common neoplastic syndrome humoral hypercalcemia of malignancy (HHM). The 18 kDa protein is a 177 amino acid (aa) precursor that belongs to the parathyroid hormone family. It contains a 24 aa signal sequence followed by a 10 aa propeptide (aa 25-34). The mature chain runs from aa 37-177. Of note, residues 108-129 constitute a nuclear localization signal (NLS) providing evidence that the protein not only acts as a secreted factor, but in an intracrine manner as well. A second isoform is missing aa 176-177, and a 34 aa substitution for aa 176-177 produces a third isoform. There is a strong homology displayed between PTHLH and human parathyroid hormone (PTH) among the first 13 aa. Studies show that the similarity in this area is 67% at the aa and nucleotide levels. Indeed, eight of the first 13 aa of PTHLH and PTH are identical. Human PTHLH and mouse PTHLH share 86% aa sequence identity.

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